

*C. S. Lefevre*

THE  
PRESENT STATE  
OF THE  
THAMES  
CONSIDERED.

[Price 1s. 6d.]

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PRESENT STATE  
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T H A M E S  
CONSIDERED;  
AND  
A COMPARATIVE VIEW  
OF  
CANAL AND RIVER  
NAVIGATION.

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By WILLIAM VANDERSTEGEN, Esq.

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L O N D O N,  
PRINTED FOR G. G. AND J. ROBINSON,  
PATERNOSTER-ROW.

1794. 206

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AT this time, when those gentlemen, who favour Canal Navigation, are exerting every nerve to accomplish their intended purpose, it may be matter of some difficulty to determine, whether they are actuated by the motives of private interest or public spirit. But it is evident, that their first endeavour is to discredit the labours of those individuals who have been appointed to the supervision and improvement of the Thames; and it is likewise plain, that they have not given themselves time, coolly and impartially, to consider on which side the preference should be, whether the expence and injury may not far exceed the benefit of deserting the navigation of the River and adopting that of a Canal.

B

Hav-

Having taken so considerable a part as a commissioner of the Thames navigation, I cannot refrain laying before the public, a Narrative of the proceedings of the commissioners, and from a very few observations, shew the former, the present, and the intended state of that river—if the gentlemen abovementioned had not taken very extraordinary methods to put a stop to the intended improvements for the present; I say for the present, for at this time the greatest improvements were proposed, and on the eve of being carried into immediate effect. After this, I am confident that all impartial persons (upon mature consideration of the advantages and disadvantages of the Thames and Canal Navigation) will with me be persuaded that the River Thames may, at a very small expence, compared to that of making a canal, be made a navigation by far more beneficial to the public than any canal. And this, independent of the injury numberless individuals will sustain by the desertion of the River; and independent likewise of the great inconvenience and prejudice land owners must receive through whose property the canal is to pass.

Very



Very many years, perhaps some centuries, before any canal was projected in this kingdom, the navigation of the Thames was very considerable, and conveyed the produce of the lands bordering thereon to London, to a very large amount, and which returned coal, and other necessary articles, in nearly equal proportion.

In the 24th of Geo. II. an act was obtained for the better carrying on and regulating the Navigation of the rivers Thames and Isis, from the city of London westward, to the town of Cricklade in the county of Wilts.

“ Whereas, the rivers of Thames and Isis have, time out of mind, been navigable from the city of London to the village of Bercott, in the county of Oxford; and from the city of Oxford westward, beyond Lechlade in the county of Gloucester: And whereas, in and by an act of parliament made and passed in the one and twentieth year of the reign of his late Majesty king James the First, 1623, (intituled, An act for making the river of Thames navigable for barges, boats, and

lighters, from the village of Bercott, in the county of Oxford, unto the University and city of Oxford) the said rivers were made navigable from the said village of Bercott to the said city of Oxford." Thus far the preamble.

It is true that the former mode of navigating, by shooting the old locks, was difficult and dangerous, and required great exertion, in the upward passage particularly.

The powers vested in the commissioners, before the 11th of his present Majesty, were inadequate to the establishment of regulation, to the correcting all abuses, or to the promoting improvements; yet the commissioners were vested with sufficient authority to fix the price of tolls, to be paid by the navigators to the proprietors of old locks and weirs, for the assistance received from the water being penned by them, and given in aid of the navigation by flashes.

From a pamphlet, intituled, Remarks, and said to be written by the late Rev. Mr. Spicer in 1772, it appears that from the time of  
passing

passing the above mentioned act, the tolls paid to the proprietors of the old locks and weirs were greatly increased, and in the proportion of from 9*l.* 4*s.* to 13*l.* 12*s.* 6*d.* to all the proprietors of locks, the Abbey Lock above Abingdon, to Boulter's Lock, both included; and by the same remarks it appears that some of the trifling fishing weirs, between Oxford and Lechlade, had the tolls considerably raised in the years 1751, 1762, and 1764, so that some of them receive the high toll of 9*d.* for five ton; and the little weir at Buscot (the whole expence of erecting which could not exceed 150*l.*) receives one shilling for five ton; that if a sufficient trade came through the Severn and Thames Canal into the Thames, to pay the subscribers 5 *per cent.* for the 250000*l.* expended and accruing due to the adventurers, the produce to the proprietor of this little weir would produce an income of 600*l.* *per annum.*

It does not appear, from any authority, whether the old locks and weirs were first erected for the purpose of assisting the navigation, or to pen the water for the benefit of

the mills. Suppose even that they were erected solely for the purpose of the navigation, the tolls paid to them by the navigators before the additions made since the year 1750, as mentioned in the above remarks, were adequate to, and a full compensation for their cost and risk of repair. However, as by the act of the 11th and subsequent acts of the present reign, these increased tolls are secured to the proprietors of the said locks and weirs, the commissioners can only expect or desire a liberal co-operation of the proprietors with them, in all plans which tend to the benefit of the navigation. The above addition of toll to the navigator, and though the then small gradual increase of every article necessary in navigation, induced and in some degree authorized the barge-masters to raise the price of carriage, of which they took advantage and became ungovernable. Therefore the want of power in the commissioners, to regulate the navigators and to raise money to make improvements, introduced a proposition in the year 1770, for making a canal from Sunning to Isleworth, which was so strongly opposed by the proprietors of lands through which it was



was to pass, and those bordering on the Thames near Henley, Marlow, and Maidenhead, and the persons long in the possession of considerable trade and property in the above-mentioned towns, that the said scheme was defeated, and in lieu of it an act of parliament was obtained, in the 11th of his present Majesty, authorizing commissioners, under the qualifications of 100*l.* *per ann.* or 3000*l.* personal property, to execute the powers of the said act, and to borrow any sum not exceeding 50000*l.* on the credit of the tolls, to erect pound locks by the side of the old locks, and to collect a toll at each pound lock, not exceeding 4*d.* a ton for the voyage of any boat, &c. to pay the interest of the money borrowed, other expences, &c. In consequence of the said authority 28900*l.* was borrowed, ten pound locks were erected; that by Boulter's, and opened in 1772, by Marlow, Temple, Newlock, Hambleton, Marsh, Ship-lake, and Sunning, opened in 1773; by Caversham in 1776; and by Mapledurham in 1778. The river was ballasted, an horse towing path was made, and many large and expensive bridges were built, from Mapledur-

ham down to the city stone, a distance of 45 miles. But there being no weir and lock between Boulter's and the city stone, the commissioners had not authority to make a pound lock, or collect any toll to repay the interest of the money expended in the said 16 miles, notwithstanding the commissioners had from time to time laid out large sums in the said second district, by ballasting and other improvements. From hence it appears, that the navigation, from Mapledurham to Boulter's, has been rendered a safe and certain navigation, and cheaper than before; I say cheaper, because it is not dearer at this time, notwithstanding that every article, necessary to navigation, is increased nearly one third, and the advanced tolls at the old locks established.

In the year 1784, Mr. Call first stating to the commissioners that their credit and finances were inadequate to the raising sufficient money to carry the improvements to the extent it appeared necessary they should be, to meet the trade expected down the canals then making into the Thames; afterwards, on the part of himself and other creditors, made a  
pro-

proposition to the commissioners of advancing any sum the improvement of the whole navigation might require, being allowed to collect such tolls at the pound locks as they should think expedient, not exceeding 4*d.* a ton for the voyage, and the creditors being incorporated. This proposition was rejected by the commissioners; and a second proposition was made to advance any sums wanted, at a limited interest, which was rejected likewise, as the commissioners paid only  $4\frac{1}{2}$  *per cent.* for the money at that time borrowed. The commissioners then appointed a committee of three, of which I was one, to wait on the chancellor of the exchequer, to solicit him to appropriate the amount of the London port duty on coals, by allowing a drawback on that article on passing any specified place; the amount of which drawback to be expended in the improvement of the navigation of the Thames; success did not attend this application, or that of the following year, for the sum of 20000*l.* for the same purpose. Soon after, in the year 1786, I offered the following plan of observations and estimates to the commissioners:

THAMES

## 3

It has been found by experience, that the erecting pound locks, and making horse towing-paths on this navigation, by virtue of the Act of 11th George III. has been attended with many and great advantages (as far as such works have been done) by rendering the navigation perfectly safe, very expeditious, and as cheap as any Navigation in the kingdom; of which the following is a state;

1786. STATE of the Debt, Money in Hand, Annual Receipts and Expences of the Thames Navigation.

The sum of money originally borrowed and now due is — — — — — £ 28,900 s. 0 d. 0

The savings accumulated are 5000*l.* reduced 3 per cent. annuities, estimated at 76

duced 3 per cent. annuities, estimated at 76  
(but now 74 will produce 100*l.* less) — — 3,800 0 0

|                                 |   |   |       |   |    |
|---------------------------------|---|---|-------|---|----|
| Cash in hand at Christmas 1785, | — | — | 1,349 | 1 | 11 |
|---------------------------------|---|---|-------|---|----|

5149 I II

## Annual Receipt.

*Annual Receipt.*  
**Net produce of tolls at 19d. per ton per voyage**

Wheat produce of tolls at 19d. per ton per voyage  
from Mapledurham — — — — — 3,342 0 0

*Annual Expenses.*

| Annual Expenses.                                |  | £    |
|-------------------------------------------------|--|------|
| Interest of 28,900 <i>l.</i> at 5 per cent. — — |  | 1445 |

|                                                 |      |
|-------------------------------------------------|------|
| Interest of 28,900 <i>l.</i> at 5 per cent. — — | 1445 |
| Rents of horse towing-paths — — —               | 160  |

|                             |   |   |   |     |
|-----------------------------|---|---|---|-----|
| Rents of horse towing paths | — | — | — | 160 |
| Salaries                    | — | — | — | 170 |

Gross repairs in 3 years — — 3109 8 11

Gross repairs in 3 years — —  
Deduct new works and extraordi-

product new works and extraordinary in the the said 3 years 1540 o o

Common repairs in three years £1569 8 11

Average of one year's common repairs 523 3 11

|                                    |     |             |             |
|------------------------------------|-----|-------------|-------------|
| Total average expences in one year | - - | <u>2298</u> | <u>3 11</u> |
|------------------------------------|-----|-------------|-------------|

Annual surplus or saving on the average — £1043 16 1

6 1  
The



The above mode of Improvement having answered so well, the same is wished to be continued from Mapledurham to Lechlade, in the county of Gloucester, to join the intended canal from the Severn; and thereby to open a communication between the Severn and the Thames, and to compleat a safe, easy, cheap and expeditious inland navigation from the heart of the kingdom to the metropolis; instead of the present long, uncertain, and dangerous navigation to and along the coast and by sea to the Thames mouth.

To effectuate these beneficial purposes as soon as may be, it is proposed to apply to parliament for an act to amend and enlarge the powers of the said act.

To allow barges to be navigated on the said rivers, drawing three feet ten inches of water throughout the year, (and as probably at some times they will not be able to load to that depth) the tolls to be paid to the old and new locks only at three feet nine inches depth.

To empower the commissioners to prevent  
barges

barges being laden more than three feet ten inches depth, or impeding the navigation by lying on ground or otherwise.

To empower the commissioners to borrow and raise the sum of money necessary for continuing and compleating the said navigation to Lechlade, for repairing the present works, and making such new ones below Boulter's, as shall be requisite, on the credit of the present and additional tolls, not exceeding 4*d.* a ton a voyage at each pound lock on the said navigation.

*The Sum necessary to compleat the said Works is estimated as follows:*

|                                                                                                                     |       |
|---------------------------------------------------------------------------------------------------------------------|-------|
| To finish Hurly pound lock — — — — —                                                                                | £100  |
| To re-build 6 pound locks, originally built with fir and decayed — — — — —                                          | 3300  |
| To make all necessary works and purchase land for the pounds and horse paths from Mapledurham to Lechlade — — — — — | 34000 |
| To make and compleat works below Boulter's (which probably will not exceed 1000 <i>l</i> .) — — — — —               | 5000  |
| Expences of obtaining the act of parliament — — — — —                                                               | 500   |
| The amount of the present debt — — — — —                                                                            | 28900 |

The whole sum wanting £71800

|                                                                                                                                                                                                                        |      |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|
| If the barges are permitted to load to three feet ten inches in depth, and pay tolls for three feet nine inches at 4 <i>d</i> . a ton at each pound lock, the amount of such additional tolls will be annually about — | 4300 |
| Add the present overplus or saving — — — — —                                                                                                                                                                           | 1043 |

|                                                                                                                                     |       |
|-------------------------------------------------------------------------------------------------------------------------------------|-------|
| The annual overplus to be expended either in amending the river or paying off the debt, will be —                                   | 5343  |
| Should 10000 more be borrowed on the credit of the tolls, interest for it, at 5 <i>per cent</i> . should be deducted                | 500   |
| Which leaves the annual overplus — — — — —                                                                                          | £4843 |
| As three locks will probably be completed between Mapledurham and Wallingford, the produce of tolls at the said three locks will be | 765   |

Therefore the annual overplus or saving will be 5608

|                                                                                                          |       |
|----------------------------------------------------------------------------------------------------------|-------|
| And this sum in less than twelve years will be sufficient to pay off the whole sum wanting, of — — — — — | 71800 |
|----------------------------------------------------------------------------------------------------------|-------|

#### SHORT RECAPITULATION.

|                                                                                                 |               |
|-------------------------------------------------------------------------------------------------|---------------|
| Present debt — — — — —                                                                          | 28900         |
| Necessary to compleat the river — — — — —                                                       | 42900         |
|                                                                                                 | <u>71800</u>  |
| Present money in hand — — — — —                                                                 | 5149          |
| Annual saving on the increased tolls at 5608 <i>l</i> . in twelve years, will produce — — — — — | 67296         |
|                                                                                                 | <u>£72445</u> |

If

If it be supposed to bear hard on the Reading and Newbury traders to have their tolls increased to pay for amendments above ;

The following is an ESTIMATE what a READING BARGE-MASTER will GAIN or LOSE, each Voyage, by the Alteration.

| G A I N.                                                    |        |   |   |   |   | £     | s. | d. |
|-------------------------------------------------------------|--------|---|---|---|---|-------|----|----|
| Tolls saved at present old locks                            | —      | — | — | — | — | 0     | 2  | 1½ |
| Freight of 15 tons of goods additional downwards,<br>at 9s. | —      | — | — | — | — | 6     | 15 | 0  |
| Ditto 12 ditto up                                           | —      | — | — | — | — | 5     | 8  | 0  |
|                                                             |        |   |   |   |   | <hr/> |    |    |
| Per voyage                                                  | { Gain |   |   |   |   | 12    | 5  | 1½ |
|                                                             | { Loss |   |   |   |   | 10    | 12 | 6  |
|                                                             |        |   |   |   |   | <hr/> |    |    |
| The Barge-master will gain each voyage                      |        |   |   |   |   | 1     | 12 | 7½ |
|                                                             |        |   |   |   |   | <hr/> |    |    |

L O S S.

|                                             |   |   |   |    |          |
|---------------------------------------------|---|---|---|----|----------|
| Supposed expence of an additional man       | — | — | 3 | 0  | 0        |
| Tolls at pound locks for 15 tons additional | — | — | 0 | 17 | 6        |
| Additional tolls on whole burthen           | — | — | 6 | 15 | 0        |
|                                             |   |   |   |    | <hr/>    |
|                                             |   |   |   |    | £10 12 6 |
|                                             |   |   |   |    | <hr/>    |

And so perfectly convinced of the above being a true state, are the principal bargemasters on the river, and many eminent traders, that they have signed and presented a Memorial to the commissioners, praying that such a Plan may be adopted, and offering to pay additional tolls; and not to raise the price of carriage.

At a meeting appointed to take the said plan



plan into consideration, it was approved, and the commissioners determined to pursue it progressively, that appearing to be the most certain mode of completing river navigation. The plan was pursued, and I attended the works, with some degree of regularity, and I have been told by many gentlemen, that if I had not met with unforeseen impediments, all the upper part of the river would have been completed, to the satisfaction of the canal companies, and would have saved the commissioners some thousands of pounds. I will take the liberty here of saying, that Mr. Loveden has spoke to me to the above purport, and will undoubtedly acknowledge it if applied to.

In 1788 application was made to parliament for additional powers, particularly to raise more money, and to obtain the authority of erecting pound locks in any part of the river, where necessary for the benefit of the navigation, even if no lock or weir was already erected. To which the gentlemen in the neighbourhood of Windsor objected, and threatened opposition to the bill, if a clause was  
not

not inserted, restricting the erection of any pound lock below Boulter's; which clause I objected to, and stood single in opinion as a commissioner attending a committee of the House of Commons, that the bill would be very deficient if the restriction was inserted; and so much so, that I was for risking the bill rather than submit to it, being fully assured that pound locks alone would make a good navigation without doing injury to the lands. Mr. Call indeed proposed, with a view to reconcile this difference, that it should be inserted in the clause, that any device might be erected, &c. which might give the commissioners sufficient powers. The bill, however, passed and became an act of this reign.

Here I must interrupt the Narrative to introduce the following address:

To the Land-Owners on the Banks of the Thames, between Boulter's Lock and Isleworth, and especially those of the level Country, between Maidenhead and Stains.

GENTLEMEN,

THE present alarming design of a junto of the commissioners of the Thames navigation,

tion, "to erect Locks and Weirs in the River," which nature has formed for the common sewer of the country; should stimulate all of you to form yourselves into an invincible phalanx, to oppose the project, and to avert the evils of that mischievous attempt.

Every act of parliament that gave the commissioners any powers respecting the navigation, carefully preserved your properties, by restraining them from placing any obstructions to the stream, in the bed of the river; and expressly forbidding any Pound Locks or Weirs—yet this junto, contrary to the express words of the statutes under which they pretend to act, and upon the opinion of an ignorant carpenter, did by their order, dated the 28th of August last, at Windsor, not only—resolve to make two Pound Locks in the river, with Weirs to each of them (one above and the other below Windsor), but also determined on an application to parliament for unlimited powers to make any Locks, Weirs or other Works they shall think proper in or upon any part of the river; whereas all the acts of parliament relating to these objects have hitherto absolutely prohibited them from

doing any thing of the kind: and, notwithstanding Mr. Brindley, Mr. Whitworth and Mr. Mylne, after carefully surveying the river, have declared it as their positive and decided opinion, that any such obstructions placed in it, would be of little use to the navigation, and must also on common floods occasion inundations of your lands, such as those you suffered from the great floods some years ago, and from which lands are long recovering.

Permit me, therefore, to recommend a meeting to be immediately called, for the purpose of concerting the best means of opposing and defeating this ruinous measure.

It is artfully insinuated, that these Pound Locks and Weirs are necessary to preserve the navigation of the river, against the effects of the proposed canal from Boulter's Lock to Isleworth; whereby the river would be deserted, and for want of boats passing as usual, it would be filled with weeds, the consequences of which would be more dangerous than the Pound Locks. But there is the best authority for asserting, that the promoters of the canal are to undertake, by their bill  
in



in parliament, to keep the river open, and the navigation of it, in the best state it is capable of, without obstructions to the regular course of the water.

Their intention is, not to injure, but to improve the river navigation; and it must be their interest so to do, because downward barges will always prefer the river without tolls or tonage, both which they would incur on the canal; and without being annoyed by upward boats, which must always prefer the canal for the certainty of water and the shortness of the passage. I am,

GENTLEMEN,

*London,*  
30th January, 1794.

Your very humble Servant,

A FREEHOLDER, on the Thames.

N. B. A general meeting of the Thames Commissioners is to be held at the Crown and Anchor Tavern in the Strand, at Twelve o'Clock on Tuesday, where it may not be improper for you to represent the dangerous tendency of the project above stated, and oppose its further progress.

C 2

I shall

I shall here take the liberty of requesting the Freeholder to inform me who are the junto of commissioners that have such alarming designs. I declare that I am at a loss how to fix on any two commissioners who have acted as a junto. It is true, that the commissioners, possessing property in the center of the navigation, are desirous of improving the river and preserving the navigation of it throughout its whole course, and they ever have been convinced that pound locks, for the purpose of navigation only will not create injury to the lands; for a committee of the commissioners of the Thames navigation, and a committee of the city, did observe in their joint survey of the river from Marlow to Kingston, on the 24th and 25th of June, 1789, that although there was six inches more water in the river than was necessary for the navigation, that the banks were so high that in no one place did the water break into the land, and especially as the commissioners determined to erect the weirs below Boulter's, according to a plan lately produced, that as soon as the water was a full navigable height, the whole space of the river

ver

ver would be opened to carry the water off, except what a few single upright posts might obstruct, which in the whole would not be a greater impediment than the erection of a bridge. To this plan Mr. Mylne the engineer has been able to make no other objection than using it as a wanton imposition on the ignorance of commissioners unacquainted with navigation, by stating the hazard of danger to those who are to take up and put down the rimers, known by every acting commissioner to be the practice at every lock and weir throughout the whole Thames navigation, and where a safe stage is not erected, as is intended to be at the weirs below Boulter's, and where the water for the use of the mills is kept much higher than will be required below Boulter's for the use of the navigation only.

I cannot omit making the following observation here, viz. that in the present penned part of the river, where the water is kept as high as the banks will bear, it is not suspected that these pens accelerate the floods, or impede the going off of the water, if the locks and bucks are kept open a sufficient

time ; what occasion therefore is there to stimulate all the proprietors of lands to oppose an object they have less reason to dread than the proposed cut from Boulter's, and the less so, as to favour a canal by Windsor, the gentlemen in that neighbourhood, (as may be seen by their Advertisement in the Reading Paper on the 24th of February, 1794), proposed even to invite a navigation down the Clewer-mill stream, and a pound lock likewise, where on the 12th of January, 1793, it was determined by the commissioners of that neighbourhood, that that line of improvement should not be adopted, for reasons best known to themselves. I have no reason to alter my opinion of that line being the best for the improvement of the Thames. As the discoveries of this Freeholder are so very extraordinary, I wish to be informed in what act of parliament is any restraint laid on the commissioners not to erect locks and weirs, except in the restriction in the above act, from erecting locks below Boulter's ; to prove that this assertion is not only uncandid but unjust, and introduced to mislead the public, I recite the following clause in act of the 28th  
of



of his present majesty, p. 10. " And be it further enacted, That the said commissioners, or any eleven or more of them, at any general meeting specially called, and duly advertised for that purpose, shall have power to make a cut or cuts into, and out of the said rivers, for the purpose of erecting or communicating with any lock or locks, pound lock or pound locks, or other devices, and to erect or make any lock, or pound lock, or other device, for the improvement of the said navigation, in the place or places most convenient, notwithstanding the same may not be by the side of, or even contiguous to any old lock ; and that all and every the powers, and authorities given and established in and by the said recited act, made in the eleventh year of the reign of his present majesty, for empowering and enabling the said commissioners to set out, ascertain, and purchase, any houses, messuages, mills, lands, tenements and hereditaments for the uses and purposes of the said navigation, and also for enabling all bodies politic, corporate, or collegiate, corporations, aggregate or sole, husbands, guardians or trustees, feoffees in trust, committees, exe-

cutors, and administrators, to contract for, sell and convey unto the said commissioners, all or any part of such messuages, mills, lands, tenements and hereditaments, for the use of the said navigation, shall, and they are hereby extended, continued, and declared to be and remain in full force, as to the setting out, ascertaining, purchasing, contracting for, selling, and conveying of any messuages, mills, lands, tenements and hereditaments necessary, or that by the order of the said commissioners shall be deemed necessary and requisite for the making of any such cut or cuts; or for the erecting of any such pound lock, weir, or other device, for the improvement of the said navigation; provided that such cut or cuts do not exceed three statute miles in length, and are not made to divert the course of the said rivers; and provided always, that no lock, or pound lock, be erected between the city stone and Boulter's lock."

I believe no other clause in any of the acts of the present reign lays a restriction on the commissioners from erecting locks, unless  
that

that of the XIth of Geo. III. p. 8. is considered so to do. I shall, therefore, recite it likewise.

“ Provided always, That nothing in this act contained shall extend to authorize or empower the said commissioners, or any other commissioners, hereafter to be appointed by virtue of this act, to make any cut or cuts to divert the present course of the said river in any manner whatsoever, between the bridge at Maidenhead, in the county of Berks and the city of London, nor any where above the said bridge, except for the sole purpose of making turn-pike locks on the sides of the present locks.”

A caution to any set of men not to be guilty of misconduct cannot give offence; the idea of its necessity would not have arisen, had the commissioners at the Crown and Anchor, on the 4th of February, investigated the proceedings of the committee; it would then have been found that due attention had been paid to the statutes; possibly such an investigation would not have favoured the designs of the meeting, &c. As I conceive no offence is attached to any caution, I shall take the liberty of giving a caution in turn;  
and

and I conclude, I cannot offend any of the twenty-three gentlemen who, qualified to act as commissioners on the 15th of January, 1794, at Oxford, and who appeared to have no other motive than adjourning (by number) the meeting to London; or the sixty gentlemen, who qualified at the Crown and Anchor on the 4th of February, 1794, if I recommend them to consider the oath they then took, that it was taken to act as commissioners to improve the Thames navigation, and to preserve the property of all persons placed under their trust, to abide by the restrictions, and every other matter contained in the acts of parliament from whence they can derive any authority. It is for every commissioner to consider how well he discharges this trust, by qualifying as a commissioner of the Thames for the purpose of diverting the navigation to a greater extent than any act of parliament authorizes him to do,

This Freeholder seems to consider the persons who call themselves engineers as infallible, and that other men cannot have an idea  
of



of inland navigation ; let me remind him that common sense is a material ingredient, in the use of which he will discover that the title of engineer is given to those who profess the art of making canals. No one has ever studied the art of improving river navigation. Mr. Brindley, who has been dead some years, did, in evidence before the honourable House of Commons, say that rivers were only fit to supply water for canals, which implies that he did not think them worthy his attention.

Mr. Brindley's reputation stands undoubtedly very high as an engineer, and, when supposed to have made a survey of the river Thames, his opinion, in respect to the navigation, carried considerable weight ; but the case is much altered, if Mr. Whitworth was the person who made the survey and drew the plans for Mr. Brindley, which, if I am not mistaken, Mr. Mylne has said was the fact.

And, Mr. Whitworth has in evidence said, that he never made a survey of any part of the Thames for the purpose of improving the river ; that he never viewed it, as an engineer,

neer, on any other account than to make a canal from it. Although his evidence is introduced to prove it his opinion, that the Thames cannot be made a good navigation; yet in a Paper, addressed to the gentlemen, subscribers to the proposed Wiltshire and Berkshire Canal, signed R. Whitworth, dated October 29, 1793, is the following remarkable passage:

When I made the survey of the line from Abingdon to Wallingford in a parallel direction with the river in 1784, I surveyed the river at the same time, and found it in exceeding bad repair, and full of obstructions, which I understand is not the case now, or at least to such a degree; and I suppose the river is now in a fair way to be put into good repair. When referring the reader to a note, he says, that

Mr. Whitworth having lately surveyed the river Thames, finds there is now little or no obstruction thereon below Abingdon, the former difficulty at Clifton being removed. He finds that the whole stoppages of last year, from Abingdon to London, added together

gether, did not amount to a fortnight's delay. They generally go from Abingdon to Wallingford in one day, and the whole of the way to London in six or seven days. The average price of tonnage throughout is 13s. 9d.

But I must confess that Mr. Mylne is in some degree an exception to the general rule, for I am much misinformed if, when he was examined respecting the practicability of rendering the rapid river Severn a penn'd navigation, he did not say that river navigation was the best, and indeed it is said in his Report to the Commissioners of the Thames, on the 8th of May, 1791, page 26. The whole of this course of the Thames is a fine river, and very capable of an improved inland navigation. To what extent works necessary for this purpose should be done, is the only subject on which there can be a difference of opinion. His opinion seems now to be altered; it is therefore probable it may again change. In support of the above observations I cannot omit stating, that at a Thames navigation meeting at Farringdon, where in the course of a debate, which required professional

sional knowledge, Mr. Cloas, an engineer, candidly confessed that he was convinced of his want of judgment, from his want of experience, by the explanations of the commissioners surveyors. The above is a sufficient excuse for his directing gauge weirs to be placed in the upper part of the sixth district without aprons, and consequently were soon blown.

In Mr. Mylne's Report to the Commissioners, from Boulter's Lock to Stains, page 42, it is stated that "boats are more heavy loaded in going from London, and they must wait for the repeated flashes coming down, which is generally twice a week, and smaller ones sometimes intervening." The fact is, that boats are lighter loaded from London than to it; this is undoubtedly a mistake, which may arise either from ignorance or inattention.

With great deference I mention, that, at a time I particularly remember, Sir John Call, who I believe is better acquainted with river navigation than any other commissioner, has in conversation with me agreed that engineers created difficulties in the management of the  
 3. Thames,



Thames, and that a few commissioners then named, assisted by the commissioners surveyors, who are judges of the power and force of the varying water, from their length of practice, were fully competent to carry on all the improvements necessary to compleat the navigation, except when a work is required to be erected, which the surveyors are inexperienced in. I continue in the same opinion. I believe I am not singular.

For an instance, a little in proof of the above observation, I will state a few circumstances respecting the improvement of the river from Sutton to above Abingdon. By powers given by an act of parliament in the reign of James the First, and vested in the commissioners of sewers of the city and university of Oxford, the navigation was made to pass at about a mile distant from the town of Abingdon, and turned out of the main river under Cassam Bridge: the navigation however was perfectly good from the said bridge to the wharf at Abingdon, but great inconvenience attended the trade on account of the distance from the course of the navigation, which opened a  
door

door for the imposition of the bargemasters, arising from the unwillingness of Oxford and other boats going a mile out of their way to take in goods.

In the many views I made of that part of the river with the commissioners of that neighbourhood, attended by their surveyors, it was not only apparent that the navigation in use was bad, and difficult to be made good, but that the town of Abingdon would be greatly accommodated by carrying the navigation as near to it as possible. Notwithstanding every attention was paid for a long time to discover a practicable line to no effect, and Mr. Jessop surveyed it for that purpose, and pointed out a partial remedy, yet I was so well convinced of the utility and benefit that would attend the accomplishment of it, that I viewed it again and again, and proposed every thing that I thought likely to bring it to bear, and at last we discovered a line which has answered the purpose, to the satisfaction of all parties, and compleated this difficult improvement, under the direction of the commissioners surveyors only, the expence

pence of executing it not varying from the estimate, 100/.

It is true that great and continued falls of snow and rain have occasioned floods, more or less, on the lands adjoining the Thames. A canal will not obviate this inconvenience, nor would the proposed weirs, though erected in twenty parts of the river, accelerate a flood or impede its going off. If gentlemen will take a little time to understand the subject, and consider it impartially, they will discover their error, and see the great opportunity designing people have to mislead and deceive them in this particular. Bad as the navigation is said to be, Mr. Page, the greatest barge-master on the river, has lately declared at a meeting of the commissioners that it was good enough for him. Many other barge-masters have asserted the same. It is certain that a great trade has been long carried on the Thames, and that the improvements and regulations lately made have obviated the inconveniences much; and if the improvements intended are allowed to be carried into

execution, the Thames navigation will be made the best in this kingdom.

The gentlemen of the Severn and Thames Company having continually charged the commissioners with neglect of improving the river, it therefore may not be improper to give some account of the commissioners proceedings in that respect. In the year 1787, Whitechurch, Goring, and Cleeve pound locks were built and opened.

In the year 1788, Benfington pound lock was built and opened.

In the year 1789, Day's, Buscot's, and St. John's Bridge pound locks were built and opened.

In the year 1790, the commissioners purchased of the commissioners of sewers at Oxford, all their right and jurisdiction of the river, from Bercott to Oxford, with their locks, &c.

Sutton was improved and repaired, the pro-



proprietor allowing 100*l.* towards the expence; and by the particular request of the gentlemen at Abingdon, the commissioners opened the channel of the river by that town, in the above year, and Abingdon, Osney, Godstow, and Rusby pound locks, were built and opened.

In the year 1791, Pinkhill pound lock was built and opened.

Soon after each of the above locks were compleated, the towing paths in most parts were made passable and commodious.

The five last pound locks did not immediately afford their intended benefit to the navigation, on account of the bad state and repair of the weirs, rendering them insufficient to pen the water in any proportion of height the pound locks do.

A committee, one of which I was, made a survey of the river from Marlow to Kingston, jointly with a committee of the navigation of the city of London, on the 24th of

June, 1789. The appointment was made at this season as the most likely for a short water, but it proved otherwise. We observed the channel to be very full of water, and were informed, and found, on actual ad-measurement, at all the shallows above Richmond, below which we do not find any shallows are complained of; that the water was not only sufficiently deep in all places to carry barges laden to three feet ten inches in depth (which is the allowance by the act), but there was full six inches more depth of water throughout: and we also remarked, that the adjacent lands were not in any one place flooded, or apparently injured by such high water.

This appears to us to be a very essential observation, as it proves that any artificial means that may be adopted for penning up, or raising the water to a full navigable state throughout, will not injure the adjacent lands.

The shallows or obstructions that we found in the channel, within the jurisdiction of the commissioners, appear to be very few, and not difficult to remedy.

In

In July 1791, the committee, of which I was likewise a member, made a survey of the river from the junction of the Severn and Thames Canal with the Thames, to Whitechurch, and made a report to the commissioners. Mr. Mylne and the navigation surveyors attended the committee. Mr. Mylne observed, that the Thames might be improved and made a far superior navigation to any canal; and although he stated that Abingdon pound lock was not built so strong as it ought to have been, he recommended 18 inches more water to be penned at that lock than it was intended to do, and thereby laying the ground above under water. In the month of August, of the same year, a canal was proposed from Boulter's to Isleworth; soon after which the inhabitants of Windsor, and the proprietors of lands bordering on the Thames, requested the commissioners to oppose the said canal, and they would consent to the repeal of the clause in the last act of the 28th of his present majesty, restraining the commissioners from building any lock or pound lock below Boulter's. But the commissioners not having given notice in due time, of their intention

to build pound locks below Boulter's, in compliance with the orders of the House of Commons, they did not, and could not apply for an act in that session. The bill to make a canal from Boulter's lock did not pass into a law.

Application having been made to the commissioners, from the Severn and Thames Canal Company, requesting them to lower their tolls, for the purpose of inviting trade down their canal, the commissioners, ever attentive to the public good, came to a resolution on the 31st of December, 1791, to reduce the tolls two pence a ton, at each of the seven upper pound locks, to all boats having a certificate of their being laden with any goods (except coals) which had passed down the canal, and did further allow a drawback of ten pence a ton on all the above boats, when they passed Boulter's Lock; from the inattention of the parties, this resolution had no other good effect than giving proof of the commissioners' good intent, and their attention to the duty of their trust, by endeavouring to invite trade sufficient through the canal, to pay the interest



rest of the large expenditure in the part of the river above Oxford. As a further proof of the commissioners attention to their trust, and of their desire to promote trade on the river, on the 26th of July, 1792, they made an order to lower the tolls three half-pence per ton, at the twelve upper pound locks, for one year; and requested the proprietors of old locks and weirs, who received eight pence for five tons, to remit three-eighths of their toll to all the goods which had passed the Severn and Thames Canal only: and likewise, about the same time, the commissioners hearing, by complaint, that the improvements above Oxford did not proceed so fast as they wished they should, they requested me to make a survey of the river, from Lechlade to Abingdon; which survey I made, and presented a report to the commissioners the August following; and from this time the commissioners wishing my attendance at every meeting, at whatever distance it might be, desired that the money I paid in expences out of my pocket should be repaid me. It may be observed, that for eight years prior to the above time, I have attended many meetings,

at all distances from home, and been at considerable expence in such attendance. And since that time I have had the pleasure of travelling by land and water whenever required, have met with no small difficulties of accommodation, some attention of mind, absence from my family and affairs: these are deemed a sufficient recompence for my expences, according to the liberal ideas of the Author of Reasons for preferring the London Canal. In August, 1792, I made a survey of the river from Boulter's to the London Stone, and from thence proceeded to Isleworth, attended by one commissioner, the clerk, and two surveyors. The Report of the extent of their jurisdiction was delivered in September to the commissioners, and I communicated to some gentlemen of the city, that it was mine and the surveyors opinion, that pound locks might be erected in that jurisdiction without the least risk of injuring the lands, and that five pound locks would make a compleat navigation in that district.

It may with great propriety be observed here; that as to the pretended objection of putting

putting weirs in the main channel, the city of London have in several instances put down what they call break-waters, or under-water weirs, which fill up a greater space (and that permanent) than the commissioners intended open weirs would do.

It is not from any survey that the gentlemen of the city of London determine that the navigation in their jurisdiction cannot be amended, or that the erecting pound locks will injure the lands, but from an unwillingness to expend the money necessary; indeed I have been told that they have not the money, and that canal projectors would relieve them from that difficulty.

The commissioners were convinced that two pound locks, one by the side of Clewer Mill, and the other by the King's Engine, would, with other little improvements, remedy the defects of the navigation in the second district, and gave regular notices for application to Parliament, without the least objection from the neighbourhood of Windsor, until some time in the month of December;

ber; but at a meeting held there the 12th of January, 1793, it was resolved, That the plan for making the navigation down the Clewer Mill stream should not be adopted, and at the same time appointed Mr. Benjamin Davies to make a survey of the second district, and report the best mode of improving the navigation of the same.

On the 14th of June 1793, The commissioners made a further order to reduce the tolls, at the twelve upper pound locks, to two-pence a ton, being a deduction of one halfpenny more per ton, for one year; and the proprietors of all the old locks and weirs were requested to reduce half their tolls to the trade which came down the canal. By personal and written application to the proprietors, they generally consented; but Mr. Loveden informing the commissioners by letter, that he would not suffer any deduction of his toll, at the trifling weir at Buscot, put a stop to this beneficial intent to the Severn and Thames Canal Company, as far as the remission of the Tolls of the proprietors of the old locks and weirs went. This did not at all affect the remif-



remission of tolls by the commissioners at the pound locks, nor was it of much importance; for the tolls of the additional trade by that canal did not appear, in the year 1792, to amount to more than 1000 tons; a small quantity to pay the interest of the 14000*l.* already expended above Oxford. But from the gross receipt in 1793, at 2½*d.* a ton at 5 pound locks, amounting to 264*l.* 12*s.* 0½*d.* it is certain that the trade down the Severn and Thames Canal has increased, probably on account of the war, cannon and such other articles being the principal commodities; nevertheless it merits and has received every attention of the commissioners to promote it.

On complaint made to the commissioners, at one of their meetings in the summer of 1793, that the water was penn'd in some parts of the navigation so high, that the lands above received injury therefrom; the commissioners requested the Rev. Mr. Durrell and myself, and any other commissioners who might chuse to attend, to make a survey of the river from Oxford to Boulter's, and fix the high and low water-marks, so as to  
pre-

prevent similar injury in future. We fixed an early day, and were attended by the surveyors, and likewise by a few commissioners, part of the way, the first day. We had the satisfaction to find that no land received injury, unless the miller kept the water above the high-water marks, where we found them fixed; and we found that raising or reducing the mark one inch, made a considerable difference. By getting out early in the morning, and pursuing our object with diligence, we completed our undertaking in five days, making observations on the improvements required, as we proceeded, and reported the same.

On the 28th of June, 1793, Mr. Davies presented his Report to the commissioners, which recommended much ballasting in different parts of that district, with a few stops at particular places. The commissioners surveyors being applied to for their opinion of the effect of the remedies recommended by Mr. Davies, assured the commissioners that they had, not long since, ballasted more than Mr. Davies proposed, and recom-

recommended to be done in the material parts, and that it filled in again the first high water; they gave likewise many good reasons, which induced the commissioners to object to his plan. After which, Mr. Davies said he had another plan, which was to recommend the erecting of pound locks.

At the said meeting it was resolved to apply to Mr. Mylne to make the survey.

At the quarterly meeting at Marlow, on the 29th of June, the surveyors were directed to inform themselves, whether limiting the number and time of giving flashes would not tend to assist the navigation, and enable the boats to pass regularly on their voyage, even when the water in the river is low below Boulter's; and to deliver their sentiments to the next meeting on the 13th of July, 1793, at Windsor: at which meeting they informed the commissioners, that it was theirs and the concurrent opinion of the barge-masters, that two flashes in the week, freely given, would greatly benefit the navigation; it was accordingly resolved by the commissioners

missioners to make the experiment, which in the practice succeeded so well as greatly to prevent delay.

On the 2d of August, 1793, the commissioners gave Mr. Mylne instructions to survey the river, from Boulter's Lock to the City Stone, and to report the best mode of improving it, who delivered his report on the 24th of August, 1793; a report by no means satisfactory to the commissioners, partly on account of his being appointed, at the same time, to make a survey of the line for the canal from Boulter's Lock to Isleworth, and there being some ground to suspect that he, himself, had not viewed the line by which he proposed to deviate from the river, and leave the town of Windsor, when he made the survey for the commissioners.

Therefore, on the 27th of the said month a committee was appointed, attended by the surveyors, to inquire into, and report on, the best method of improving and amending the said navigation, from Eton Wharf to the South Hope; and also what part of Mr. Mylne's



Mylne's plan should be adopted. The report of the said committee of which I was one, is printed. I cannot avoid this opportunity of saying, that I am, from my own experience, confident that a pound lock below, and another above Windsor, will be the greatest improvement that ever was made on the navigation, and that no injury can attend the land from it.

The commissioners held many meetings, chiefly at Windsor, and on the 28th of August, 1793, they determined on their plan, according to the report of their committee, and appointed a committee to pursue every necessary step to obtain an act of parliament to repeal the clause which restricted the commissioners from erecting pound locks below Boulter's, and to authorize them to erect a pound lock by the king's engine, and another by the Cuckoo Weir, and to collect tolls thereat ; and to make such amendments, and to obtain such additional powers, as appeared requisite, and particularly, powers to borrow more money ; and to oppose the canal proposed from Boulter's Lock to Isleworth,

and any others that appeared likely to divert the trade from the Thames.

The above committee frequently met, and had proceeded so far as to be on the eve of presenting their petition, when, at a meeting on the 15th of January, 1794, at Oxford, the number of twenty-three gentlemen, from a distance, came and qualified to act, seemingly for the sole purpose of adjourning the meeting to the Crown and Anchor Tavern in Westminster, on the 4th of February, 1794; at which meeting the number of sixty gentlemen qualified to act, and consequently carried every point they had in view by this manoeuvre, particularly that for rescinding the resolution by which the committee were appointed, and thereby preventing the commissioners from going into parliament this session, notwithstanding the following clause in the act disqualifies every and any person from acting when interested, viz.

“ Provided always, and be it further enacted by the authority aforesaid, That no commissioner or commissioners shall act in the execution

execution of this act, or any of the powers herein contained, where he or they is or are any ways particularly interested, under the penalty of One Hundred pounds; to be levied by distress and sale of the offenders goods and chattels, by warrant under the hands and seals of three or more of the other commissioners; which penalty or forfeiture shall and is hereby directed to go to the same uses as other penalties by this act are to be applied."

If the subscribers to the London Canal are subject to this penalty by their vote on the 10th of March, 1794, and had the names been taken down as demanded, the majority might have appeared different.

The manoeuvre of these gentlemen has undoubtedly prevented the commissioners from presenting a petition against the said canal from Boulter's Lock, which was signed by many, and intended to be by most of the acting commissioners. It is said, but with what truth I know not, that a petition has been signed by 130 commissioners and presented in favour of the canal from Boulter's:

possibly it may; but if the signature of so many commissioners has been obtained, they may have qualified for the sole purpose of signing the petition; management has not been wanting to mislead the public opinion, and to discredit the navigation of the Thames with some degree of unfairness.

I have never made a serious objection to the appointment of engineers, but I believe it has been generally known to be my opinion, that their expences have very far exceeded the benefit derived from them, and that the commissioners' surveyors are competent to every improvement on the river. I have acquiesced in the appointment of engineers for two reasons: 1st, that as the commissioners, who attend little to the execution of the works, have an idea that engineers must have great judgment, therefore it would have been imprudent to object. But considering their want of practice in river navigation, which occasions them to be quite at a loss, and likewise prejudiced in favour of canals from interested motives, renders them hurtful to the true interest of the Thames  
naviga-



navigation. And 2dly, I have had some hope, that the commissioners' surveyors would obtain information which might be of service to the commissioners. In this second point I have been deceived, from the engineers not being communicative, and retaining any knowledge they may have in river navigation to themselves. But let the commissioners' surveyors be carpenters, or what you please, they have acquired a knowledge from experience in river navigation which renders them superior to engineers without practice in that particular branch.

Confident that the report of the honourable committee appointed in the last sessions of parliament by the honourable house of commons, to enquire into the progress made towards the amendment and improvement of the navigation of the Thames and Isis, in consequence of the several acts passed for that purpose, and also into the amount of the receipt and expenditure, and of the state of the trade of the said rivers, has been not only the cause of general censure on the whole body of commissioners, but it has likewise

given discredit to the navigation itself. Therefore being assured, that every honourable member of that honourable house acts on principles solely devoted to the public welfare; and that the honourable members particularly who attended the said committee, possess the principles of promoting public good in the highest degree; I am persuaded from their honourable and just intentions, any observations I may make on the said report, for the purpose only of stating some little mistakes and errors therein, will be excused, and from the active part I have taken, as a commissioner of the Thames, they will be attributed to the true cause, viz. an endeavour to rescue that navigation from such parts of censure it seems not to deserve; being certain that it is the wish of every individual to judge as favourably of that fine and much admired river as it has any claim to.

The accounts from the chamberlain's office in the city of London, delivered by Mr. Montague, in Appendix I. and II. is an undoubted proof of the large expenditure made by the city, which, on an average of five years, amounts to 303l. os. 8<sup>1</sup>/<sub>2</sub>d. annually,  
over

over and above the receipts. It is likewise a proof of the large expenditure made by the city in the improvement of the river, and that the sum of 12,200 l. has been borrowed for that purpose: but 2790 l. 10 s. 11 d. interest on 7500 l. at Christmas 1792, should not be considered as a debt, the interest being charged annually, and makes even more than the deficiency of the account above stated. It is a proof likewise that the city of London have expended a large sum of their own money, to the amount of 10,889 l. 11 s. 1 d. over and above the large expence of 1356 l. 7 s. 3 d. for the barge the collector uses. The expence of views, &c. amounts in the whole to a large sum; but it appears to be an annual expence, not a debt. It may be proper to observe, that the gain from annuitants falling in, and other circumstances, that although the tolls are deficient on an average annually 303 l. 0 s. 8½ d. the balance 1785 of 1084 l. 1 s. 2½ d. has been reduced annually, at the rate of 130 l. 4 s. 0 d. only; therefore, the last sum of 130 l. 4 s. 0 d. appears as if it should be deemed the annual exceedings.

Mr. Truss, clerk of the works to the city (not an engineer), gives considerable evidence from his own knowledge, and gives likewise a great deal from his opinion, even beyond his own jurisdiction, very freely, and unsupported by the opinion of any engineer in his own district. His account, as per Appendix V, stating the number of tons coming from various places, and for which tolls were received by him on account of the city, as stated in the said account from the 29th of September, 1791, to the 29th of September, 1792; the whole amount of the said tolls, according to the table opposite to each place, amounts in that year to 2680 l. 17 s. which is 692 l. more for that year than the average of the five years stated in the account from the Chamberlain's office. Mr. Truss does not point out any particular works done, or erected in the city's jurisdiction, except underwater weirs, stops, ballasting, and making towing-paths, &c. in like and similar manner as the commissioners in the upper districts have done in the second district below Boulter's, where they take no toll for all their expenditure in that part of the navigation.

Mr.



Mr. Allnutt, clerk to the commissioners, gives an account of the reduction in the price of freight, and of the sums of money borrowed, the large expenditure for the improvement of the navigation, and of that annually; as well as an account of the great number of expensive works erected on the navigation, and now existing in use.

Mr. Clark, surveyor to the commissioners for the second and third districts, confined himself to his own districts, and gave his opinion as surveyor of the same, pointing out the defects and the means by which remedy may be certainly obtained, and gives all the information required of him.

Mr. Treacher, surveyor for all the districts in the commissioners' jurisdiction, but particularly from Maple-durham to Lechlade, points out likewise the defects in the navigation, and gives his opinion of the means to obtain a remedy to them, and gives all the information required of him.

Mr. Cloas speaks chiefly from opinion.

Mr. Whitworth's evidence tends not so much to point out the defects in the Thames, and to apply a remedy to them, as to give his opinion, that a canal will make the best navigation. I believe Mr. Whitworth said, that he never surveyed the Thames for any other purpose than to make a canal from it, and that he never had surveyed it for the purpose of improving it, therefore, he never was employed as an engineer.

Mr. Mylne says, that the navigation from Lechlade to Oxford will be good when the works recommended are completed; he states very justly the bad repair of the old weirs; some are since substantially repaired; but in respect to the contract made by the Oxford committee, it may be found to be so legally drawn as to be binding to the parties; he takes no notice of the long high water which stopt all works on the river for near a whole year. Mr. Mylne gave his opinion as freely on the part of the navigation below Boulter's, which he had not surveyed, as he does of the part he had.

Mr.

Mr. Court, a very young bargemaster, gave his opinion freely.

Mr. Langley's evidence is that of a plain bargemaster.

Mr. Moulds, Mr. Chambers, and Mr. Black's evidence, go to points of trade likely to be procured, which, undoubtedly, shews the necessity of improving the navigation of the Thames to receive it.

My own evidence is very accurately stated, but my observation that the want of water in the Severn and Thames Canal to bring goods to Lechlade, was a reason that there was no just ground for complaint of loss, on account of the bad state of the Thames above Oxford was not noticed, I was informed that a fire-engine was erecting which would supply water sufficient at all seasons.

I hope it will not be considered improper to observe, that the expenditure of the commissioners appears to be fully equal in point of utility and works in the 3d, 4th, and 5th  
dis-

districts as those in the 1st, and that the works in the 2d, are similar to those in the 1st likewise; and that the expenditure of £3738l. 7s. 3d. in the 6th, or upper district, is a proof that the commissioners intent was to invite, and convey, any trade which might come by the Severn and Thames Canal; notwithstanding that no trade, and consequently no receipt, was had; nevertheless they were pursuing the best line they could form, from the surveys of Mr. Mylne and Mr. Jessop, assisted by their surveyors; whose judgment, from practice, I consider as equal to engineers, who are unacquainted with river navigation.

The commissioners have, in duty to their trust, opposed every canal intended to deprive the Thames of water, and likely to injure any town on the river, by a diversion of the navigation from it.

The commissioners have not collected a toll in the second district for towing, on account that the expence of collecting it will be nearly equal to the receipt.

Had



Had the gentlemen, in the neighbourhood of Windsor, fulfilled their agreement with the commissioners of the upper districts, pound locks would have been erected in the second district.

All the other observations I so far agree in, that I hope power and authority may be given to commissioners, under any regulation, sufficient to improve the Thames throughout, in such a manner, that the public may receive the benefit, both of the increase of trade, and, the natural consequence, reduction of the tolls, being convinced that it may be made the most beneficial navigation to the public, of any in the kingdom.

From the time of my commencing to be an active commissioner of the Thames navigation, I entertained the opinion, that the whole navigation, from Isleworth to Lechlade, should be equally improved by pound locks; and that the navigator should pay a toll, as nearly as possible, proportioned per mile, and that the tolls at the old locks should be reduced.

Not.

Notwithstanding all the complaints made against the Thames navigation, that there are impediments or obstructions that cannot be easily remedied; and being, from my own knowledge and experience, convinced that pound locks, with open weirs, will produce the desired remedy, and will not accelerate a flood, or impede its going off, consequently no injury can be done to the lands on that account. By my conversing on the subject with many engineers, I am confirmed in my opinion, that the Thames has sufficient supply of water to carry all the trade that can be brought into it, by placing a few intermediate pound locks when necessary. On account of the circuitous course of the river, and the many towns thereon, fifty thousand tons of goods have, for many years, been conveyed to London, the produce of the lands adjoining; and necessary articles of consumption, for the inhabitants, brought in return. These are surely strong arguments for keeping the course of the river; and, especially as I have not a doubt of proving, that this navigation is now, and ever will be, cheaper than by canal; and that the delays are fewer likewise.

The

The delays, difficulties, and unreasonable expence to the navigator, arise from the want of water, over the shallows, for a boat to pass, at all times without the aid of flashes, from a full penn'd water above. From the difficulty of towing, in particular parts, which require additional horses, as well as lines: from the distance of the horses, in places, from the boat, from floods and frost, from the heavy tolls paid to the old lock and weir proprietors, and impositions.

Having mentioned the delays and difficulties, it will be expected that I introduce a remedy. I give it as my determined opinion, that pound locks, erected by the side of the river, with weirs in the river, made open at pleasure, by taking up the rimers, will not accelerate a flood, or impede its going off, and therefore will be no injury to the lands adjacent.

These pound locks will, in dry seasons, penn water sufficient, over the shallows, for the purpose of navigation. No penn is required at other times. They will likewise  
remove

remove the chief and greatest difficulties of towing; they will deaden the current of water, and additional lines will be unnecessary.

When the difficulty of towing is obviated, the expence of additional lines will be removed; and, though the toll is paid at the lock, the expence will be proportionably reduced, with ease, safety, expedition, and certainty of water.

If the pound locks do not obviate all the difficult points of towing, the horses and boat may, and should be put nearer together. Floods and frost I acknowledge to be beyond the power of remedy.

It is now a full month since I requested the surveyor, Mr. John Treacher, to enquire of all, and any barge-master, or others, if they can recollect any particular times of stoppages on the navigation, by flood, frost, or short water, in the last twenty years. But notwithstanding the general complaint against the Thames navigation is so strong and pointed,



on these very accounts, that another line of navigation must be found out, I cannot obtain any statement of particular delays, except of about a fortnight each, two or three times, in the above course of years; I think my own recollection supplies me with only two stoppages, by floods and frost, and one from shortness of water, when many boats lay, in the city's jurisdiction, as long as a fortnight; but I have no minute of it. However, as my object is to discover, and promote the best navigation, I shall be obliged to any gentleman who will give information, respecting delays from the above causes. I have no other interest than, as a commissioner desirous of discharging my duty, in that, and every other situation, to the best of my ability; for which reason I can derive no advantage from the concealment of facts.\*

I have

\* Since the above, Mr. John Treacher has referred for information to the book of tolls, taken at Sunning Pound Lock, on the upward passage, by Thomas Hall, pound-keeper: wherefrom it appears that no toll was taken for upward boats.

From

I have before stated the advance of the tolls, at the old locks and weirs, since the 24th of George II. they are undoubtedly an heavy tax on the navigator; but they are confirmed to the proprietors, by the act of the

|                                                   |   |   |   |   |   |          |
|---------------------------------------------------|---|---|---|---|---|----------|
| From the 13th of February, 1774, until the 5th of |   |   |   |   |   |          |
| March, being                                      | — | — | — | — | — | 12 days  |
| From the 10th of January, 1775, until the 2d of   |   |   |   |   |   |          |
| March, being                                      | — | — | — | — | — | 50       |
| From the 21st of January, 1784, until the 8th of  |   |   |   |   |   |          |
| February, being                                   | — | — | — | — | — | 17       |
| From the 28th of December, 1785, until the 20th   |   |   |   |   |   |          |
| of February, 1786, being                          | — | — | — | — | — | 35       |
| From the 13th of December, 1788, until the 20th   |   |   |   |   |   |          |
| of January, 1789, being                           | — | — | — | — | — | 37       |
| From the 31st of December, 1790, until the 28th   |   |   |   |   |   |          |
| of January, 1791, being                           | — | — | — | — | — | 27       |
| The whole in 20 years being                       | — | — | — | — | — | 185 days |
| or 9 days and a $\frac{1}{4}$ each year.          |   |   |   |   |   |          |

There is no minute, of any stoppage, in the said account; but it infers, that there was one within a few days, above stated, of the time; for boats do not pass upward every day, and no account is kept of the downward boats.

It sometimes happens that hindrances arise of a day, and which occurs on every navigation, from some cause or other; we may therefore conclude, and allow, that the Thames navigation is, upon an average, impeded and stopt by flood, frost, and short water, as many as fourteen days every year. Which seems to agree with the account Mr. Whitworth has procured.

with of his present Majesty. I therefore recommend the commissioners to purchase the tolls of all the locks and weirs, above Sunning, for the sole purpose of taking only half the toll from the navigator, of the trade which passes the canals. For this purpose it was intended to obtain the power to raise 75000l. more, on the credit of the tolls, &c.

Although I am decidedly of opinion that pound locks will remove the principal difficulties and obstructions on the navigation, yet there is an opinion, that canal navigation is better than the navigation of the Thames, from being less liable to delays, therefore more certain and cheaper. It may be necessary to state here, the general time boats pass from different places to London, and return.

On account of unloading, a boat from Lechlade is three days getting to Oxford; from Oxford to Sunning two days; from Sunning to Boulter's one day; from Boulter's to Brentford one day; and to London, as the tide serves, being eight days. When the

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river is compleated, above Oxford, it will be gone easier in a day less.

A boat is six days returning from London to Oxford.

A boat goes from Wallingford to London in four days ; from London to Wallingford in five days.

A boat goes from Reading to London in three days ; from London to Reading in four days.

From and to all the above places, it is frequently gone in less time ; but something particular must happen to occasion the delay of another day ; yet it may sometimes happen, though but seldom, as stated above, that there may be a delay of a fortnight or more, from floods, from frost, or short water.

Canals are proposed, as a remedy to these delays on the Thames. But as I believe it is true, that all canals want water in dry seasons, I shall be much obliged to any person to point



out those which do not want water in a greater degree than the Thames does. The Severn and Thames Canal was last summer emptied of its water, for the purpose of repair, and had little in it for more than twenty weeks, notwithstanding the certain supply of a fire engine, which is worked at great expence. The Coventry and Oxford Canal likewise wanted water, in a great degree, above three months, aided by a fire engine likewise.

In the last moderate frost, both the Severn and Thames, the Coventry and Oxford Canals, as well as others, were totally stopt three weeks, when the Thames was, the whole time, free and open for navigation. In the considerable flood and frost, in 1784, the Thames was stopt, by floods and frost united, only eleven days, when canals were stopt eleven weeks by the frost.

Mr. Whitworth, likewise, in a Report, dated the 30th of October, 1793, states, that the Thames navigation is good from Abingdon, and that all the stoppages, united, did

not interrupt it more than a fortnight in the whole year,

Mr. Mylne likewise states, in his Report from Boulter's, that he observed, by the old plan, that the Thames is much improved in that district.

The above facts must convince every person (except those who depend upon the premium on their subscriptions to the canal) that canals are more liable to delays than the Thames is, and therefore the plea of a quicker passage from London, only a part of the year, cannot be deemed sufficient to justify the desertion of any town, situated in the course of the river; and to the very great loss and injury to the trade and property thereof, for it would remove both the trade and market to another place.

So far from a canal establishing a certainty of passage, it will be less certain, on an average, than the river is. As to cheapness, a moment's reflection will discover that the interest of 120000*l.* will require a toll, so high,  
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to give any satisfaction to the subscribers, as for that alone to exceed every expence of navigation, on the Thames, even in its present state, and without any consideration for the expence of navigation, by the canal and afterwards. And as the projectors of all canals propose and undertake any incumbrances, even to keep the Thames in repair and pay off the debt; how is it to be done by the present trade? And if more is brought into the Thames, by canals or otherwise, the public are entitled to the benefit; for with very little addition of receipt, the commissioners will be enabled to remit part of their tolls and discharge part of their debt; having no private pocket open to receive any exceedings over and above sufficient to defray the necessary expences,

I must observe, that a canal from Boulter's, or from Sunning, cannot be made without taking the water from the Thames immediately, or the water in the line of the canal, which has been ever deemed a part of supply to the Thames. Every such diversion of water in dry seasons must reduce the water in

the Thames, and would, in the space of time, operate greatly to the injury of the adjacent lands.

My object is not opposition, but to convince all parties that the navigation of the Thames will be more certain, as safe, and cheaper than any canal; and if so, more beneficial to the two extremes, London and Bristol, and to the public at large, even if we allow that time will be saved in the upward passage; yet that saving will be much lessened by the numerous stoppages to pass the locks and bridges, in so much that the saving will not exceed six hours in a voyage. Accommodation should, undoubtedly, be promoted to individuals, and likewise to the public; the former naturally gives way to the latter, but then the benefit must be great and certain, and the injury small. In this case, if the two extremes are only to be attended to, the greatest injustice will be done, not to individuals, but to considerable towns, already possessed of great trade, and who have long navigated on the Thames, and been the means, in some degree, of enabling  
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the commissioners to improve the navigation as it now is, and to proceed towards its completion. But when it appears, or it is at least a doubt, whether it is not for the interest of all parties to continue the course of the Thames, with what pretence can proprietors of lands be requested to suffer their property to be divided, and otherwise much inconvenienced to gratify a whim, if I may so call it? and such persons, who generally subscribe to canals, for the sake of the premium only, a few excepted; for I do bear testimony, that a proposition has been made with a candour and liberality which does honour to the gentlemen concerned.

The constitution of the Thames navigation is disapproved, and particularly so as no person is interested, few commissioners making a point of discharging their trust with regularity and attention; the qualification likewise being such as admits a number of persons, which sometimes tends to defeat the benefit intended to the public.

But had the commissioners been permitted to go to parliament this session, a clause was  
drawn

drawn in their intended bill to prevent any commissioner from acting, until he had been six months qualified by oath. Several schemes were proposed with a view of obtaining the attendance of commissioners ; one by appointing a committee to superintend the whole navigation, and to report to the general meetings such things as required their attention, and to appoint a committee likewise in each district, to attend to the execution of the work directed to be done in such district. Another, that the general meetings should be held in one place, and that district meetings should be held frequently, and report to the general meetings. If the commissioners were more limited, and those could be induced to act, what could promise a better prospect for promoting public benefit, than that the navigation of the Thames should be conducted by disinterested and active men,

By what has been said, I would not have it understood that I am an enemy to canal navigation, or that I am insensible to the very great benefits which arise from it  
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to those countries where no other water-carriage is to be obtained. All that I contend for is, if not the preference to river navigation in general, yet to the Thames navigation in particular. And I oppose those persons only of profound speculation who, without regard to general benefit, or partial injury, consider their own interest alone, or how they may employ their idle hundreds to the greatest advantage. In many of the interior parts of this kingdom, persons possessed of mines, or other articles of heavy carriage, must have derived infinite advantage from the canals already in use. Manufactures must have been benefited, and therefore promoted by the cheapness of the conveyance of the raw materials, of provisions for the manufacturers, and of the wrought goods brought more readily to market. Agriculture must have likewise derived a bounty, if I may so express it, by the easy delivery of its produce at all distances, and a general emulation is provoked, through every branch of trade, by the access which is opened to so many parts of this fertile and flourishing island. But at the same time, we are not to be so far car-

ried away with these benefits, great as they are, as to suppose that the more canals we have, the greater and more general such benefits must become ; because we know, that trade will always find its level, notwithstanding any exertions of ours to the contrary ; therefore, if there are more roads, or more carriers than there is produce to carry, some of them must sink entirely, and all of them must feel deficiency of employment, as in the present particular instance, where there is already from nature a water carriage, from a large tract of country to the metropolis, and which I know may be improved, even to perfection, at an expence infinitely below that of making a canal.

What reason can be given, why a very large sum of money should be expended, in opening a new conveyance through the same line of country, to entail a great burden on the public, and so great injury to a numerous description of persons, whose property and subsistence depends wholly on the trade of the Thames? and all this only to serve the purposes of designing men, who,



who, by holding up the advantages which have already, in some instances, been derived, would infer that advantages, equally great, must in all instances follow; and when they have thus raised the public expectation to a convenient height, and secured the original subscription to themselves, they have only to take care that the weight and hazard of the execution of their scheme may fall upon the shoulders of others, and not upon their own.

For these reasons, when an expensive canal is projected, without mature consideration of its probable or visible conveniences or inconveniences, it is the part of the public to deliberate upon all its peculiarities of circumstances and situation. If the line of canal approaches too near to others, already completed, the proprietors must be disappointed in their expectation of gain, and the public benefit be much abated, by the trade being divided into too many channels. If there are only two canals through the same tract of country, to the same point, even though it be to the metropolis, the profits of the trade may

may be found sadly deficient for the maintenance of them both, even if it is known to allow a good interest for one. The repairs and management must certainly be double, without increase of income (for what income can arise beyond what the whole trade will produce?) This double charge must increase the burthen on the public, which must be perpetual, and without remedy. Whereas if there is but one line of water carriage, through the same country, and this what may be effected at much the least expence, overflowings of advantage are to be expected, from this, possessing the profits of the whole trade, which will go into a sinking fund, to reduce that burden, which at first is comparatively light, and which, from these means, will regularly and rapidly be decreasing.

An individual, who has no private interest to promote, can have no desire to obstruct the fair advantage of others; but, as a true lover of his country, he can never think himself employed so agreeably as in promoting its welfare; nor can any prospect be so pleasant, to him, as to behold its prosperity.

